

CHARACTERISTICS OF DEPARTMENT OF DEFENSE MEDICAL MALPRACTICE CLAIMS: AN UPDATE

A Quality Management Tool for DoD(HA), the TRICARE Lead Agents and the MTF

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INTRODUCTION

Medical malpractice data collection and trend analysis has become standard practice for many large managed care organizations and insurers in the United States. The Department of Defense (DoD) and the Department of Veterans Affairs have established medical malpractice claim databases for the purposes of quality improvement and risk management. Insurers in the private sector, such as the St. Paul Fire and Marine Insurance Company and the Physician Insurers Association of America, a national organization of 47 physician-owned professional liability insurance companies, collect risk management data in similar fashion. Federal agencies that directly provide health care have an additional interest in collecting such data. Congress and the Government Accounting Office have repeatedly demonstrated a special interest in the medical liability experiences of those federal agencies.¹

Medical malpractice data has also been used to support other quality management efforts. Liability data can highlight specific areas potentially needing focused study by other quality improvement programs, such as those for patient care assessment and external peer review. For example, some DoD studies undertaken by the Civilian External Peer Review Program were implemented in response to medical malpractice data. In the Department of Veterans Affairs, a number of treatment facilities use malpractice data to focus other quality management programs. Finally, malpractice case summaries can serve to educate healthcare providers about past mistakes and those areas of clinical practice with greater exposure to claims. Medical malpractice analysis, therefore, will likely continue to be an important component of the health care quality management programs of DoD and the Department of Veterans Affairs for some time.

This article is an update regarding the DoD medical malpractice database maintained by the Office of the Assistant Secretary of Defense (Health Affairs) with assistance of the Department of Legal Medicine, Armed Forces Institute of Pathology. Since 1991, the Department of Legal Medicine has annually reported summaries from the database to the DoD (Health Affairs) Risk Management Subcommittee and to the Joint Service Quality Management Committee. Currently, the database contains information abstracted from medical malpractice claims involving DoD health care facilities, resolved between 1988 and 1995. Claims are resolved or “closed” when final legal action has been taken. An initial report, describing the data collection process and entries from the first 1,544 closed malpractice claims submitted to the project, was presented in *Legal Medicine Open File* in 1992.² The database, alternatively known as the “abstracts of closed medical malpractice claims database” or “Tort-2”, contains 63 fields or data elements. Because of the difficulty involved in obtaining a high level of detailed medical and legal information from incidents occurring several years earlier, data abstracted from closed malpractice claims are at times incompletely reported. This results in different totals for specific data elements as well as reduces the total number of complete reports. Nevertheless, this database contains a significant portion of complete closed DoD malpractice claims. Incomplete reporting has been reduced by developing an improved data collection form,

DD Form 2526, and a procedure manual, as well as conducting periodic meetings of appropriate personnel assigned to this function from the three Offices of the Surgeons General.

HISTORICAL MALPRACTICE DATA

Since the mid-1980's, the number of medical malpractice claims filed against the DoD has usually been in the range of 700–900 claims per year (Table 1). For 1993 and 1994, the average number of claims filed was 1,035. This may solely reflect an actual increase and represent the beginning of an elevation of malpractice claims activity for DoD. However, this increase may also reflect the increasing trend for a single malpractice case to generate numerous claims from relatives of the patient-claimant.

Since 1986, the rate of claims per 100 physicians in DoD has been in the range of 4.6–8. This is compared to data from the St. Paul Fire and Marine Insurance Company in Figure 1. Their experience is approximately 13–15 claims per 100 insured physicians annually.³ The information is reported as claims filed per 100 physician providers, because that is a common format for reporting the frequency of malpractice suits by private insurers. Exact comparison with private sector claims experience is difficult for three reasons. First, some adjustment downward of the DoD rate might be justified given that physicians are the specified responsible parties in only 85–90 percent of DoD malpractice claims. Second, the Feres Doctrine, which precludes active duty service members from filing this type of claim, necessarily affects the rate reported for DoD. Were active duty members permitted to file claims, the DoD rate would increase. Third, multiple federal claims can result from a single incident. If only cases are reported, as common in the private sector, the DoD rate would decrease.

TRENDS IN DOD MALPRACTICE CLAIMS

YEAR	NUMBER FILED	TOTAL DOD MD/DO YEAR END STRENGTH	RATE/ 100 MDs/ DOs
1986	895	13269	6.7
1987	876	13191	6.6
1988	995	13226	7.5
1989	872	13442	6.5
1990	685	13815	5.0
1991	653	14225	4.6
1992	776	14276	5.4
1993	996	14076	7.0
1994	1073	13709	7.8

TABLE 1

CLAIM FREQUENCY

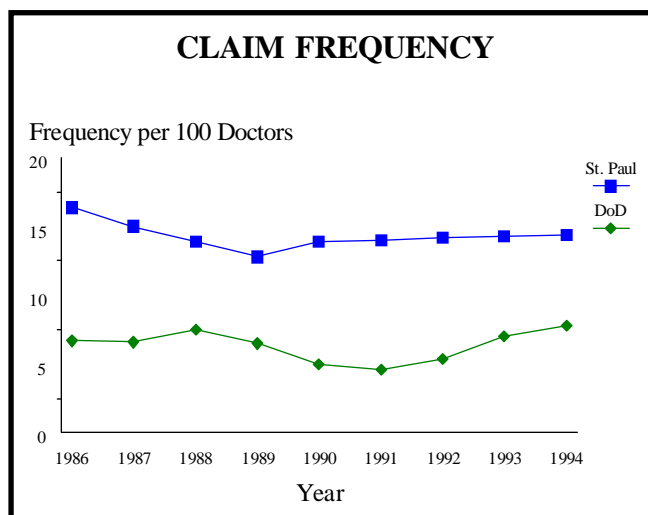


FIGURE 1

PATIENT CHARACTERISTICS

Nearly one-fourth of patients involved in DoD malpractice claims are less than two years of age. Approximately two-thirds of claims involve patients over the age of 19. St. Paul recently reported the age breakdown of patients for their paid cases.⁴ An age comparison of DoD and St. Paul paid claims is depicted in Figure 2 (next page).

Fifty-four percent of patients filing DoD medical malpractice claims were dependents of active duty service members, and approximately 30 percent were retirees or their dependents.

With regard to the severity of injury for patients involved in DoD claims, nearly 23 percent died, 16 percent experienced no injury, and the remainder had some degree of injury.

CLAIM CHARACTERISTICS

Figure 3 illustrates the legal outcome of 2,910 malpractice claims for which such data were available. Approximately one-quarter of the claims were settled administratively by the respective military service. Over one-third, 34.3 percent, were denied as nonmeritorious. Other bases, such as the statute of limitations and the Feres Doctrine, supported the administrative denial of another 15 percent. Twenty-five percent of claims proceeded to litigation. They were then managed by the Department of Justice, who settled more than 14 percent without a trial. Only ten percent of claims were formally litigated in a federal court. The government successfully defended approximately 60 percent of those cases.

Concerning the nature of the primary malpractice allegation, various codes for act or omission were created for Tort-2, and 3,077 entries are reported at Figure 4. Forty percent of those claims, for which such data were available, involved allegations related to diagnoses. These included such acts or omissions as failure to diagnose a disease or condition, misdiagnosis of an existing condition, improper performance of a diagnostic test, a delay in diagnosis, and failure to obtain informed consent. Twenty-one percent of the

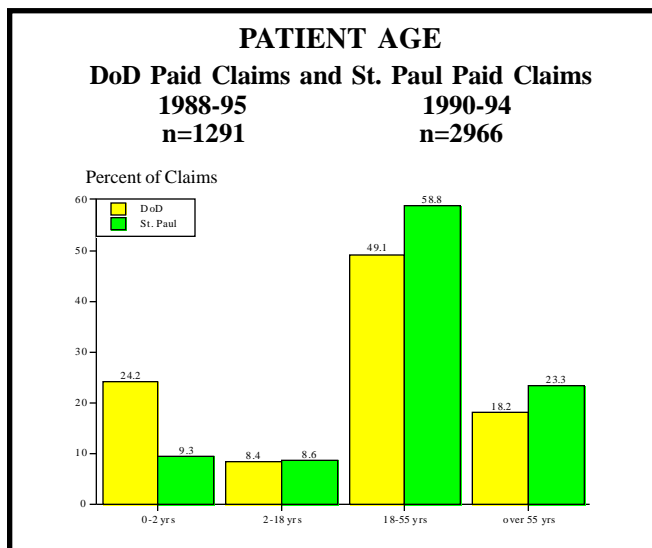


FIGURE 2

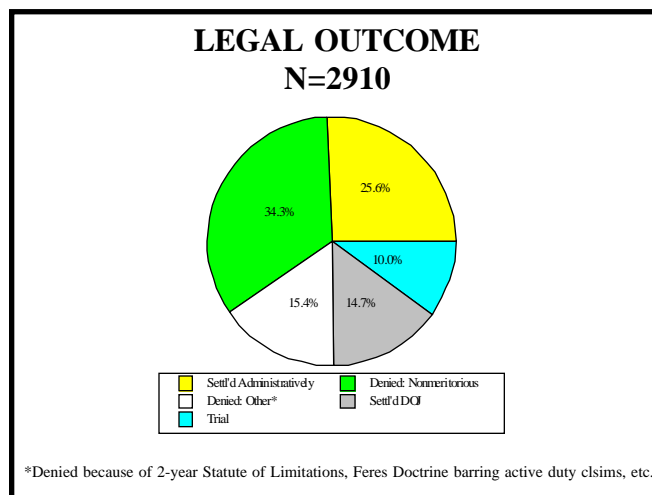


FIGURE 3

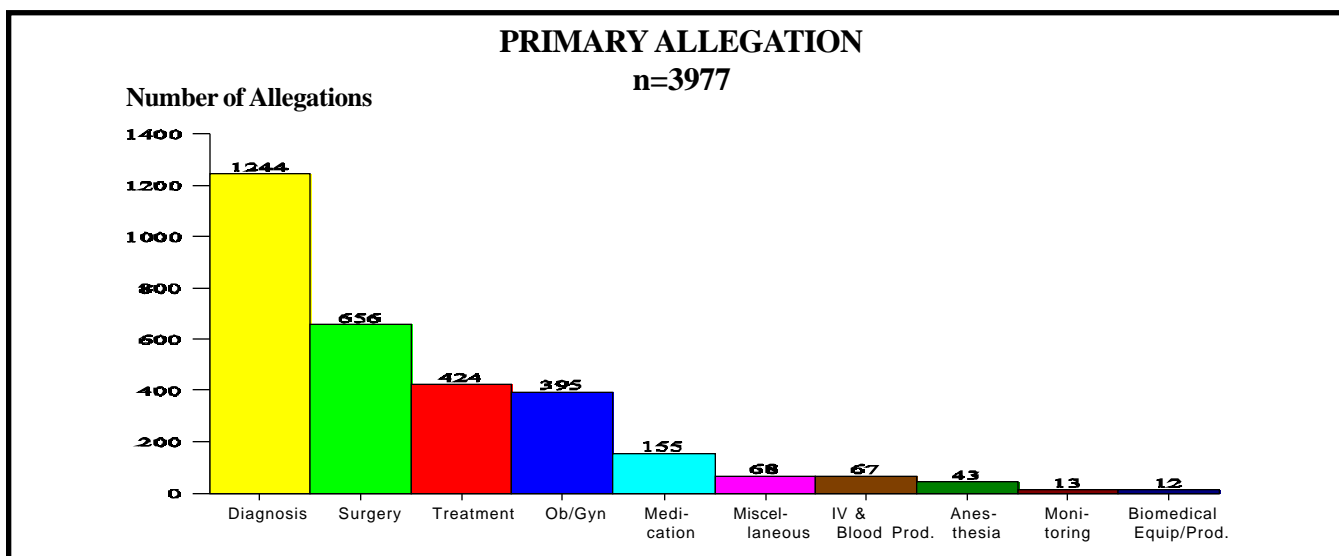


FIGURE 4

primary allegations were related to surgery. These included allegations of retained foreign bodies, operations on the wrong body part, improper performance of surgery, unnecessary surgery, delay in surgery, improper management of a surgical patient, and failure to obtain informed consent for surgery.

Fourteen percent of the claims were related to treatment. They included such allegations as failure to treat, improper performance of a treatment or procedure, improper management of a course of treatment, premature end of treatment, and failure to seek consultation. Thirteen percent of the sample claims were related to obstetrics. These included failure to adequately manage pregnancy, improperly performed vaginal delivery, improperly performed cesarean section, a negligent delaying delivery, improperly managed labor, and failure to identify and treat fetal distress.

Approximately five percent of the claims were related to medication. These included failing to order appropriate medication, ordering the wrong medication, ordering the wrong dosage of the correct medication, improperly monitoring medication, failing to obtain informed consent for medication, administering the wrong medication, administering the wrong dosage, and using improper technique in administering medication. Approximately two percent of the claims were related to intravenous procedures and blood products. These included failure to insure the solution to be contamination-free and utilization of an improper type of infusion. A small percentage (1.4 percent) of the claims included acts or omissions related to anesthesiology. These included failure to complete an adequate patient assessment, failure to monitor a patient, improper choice of an anesthetic agent or equipment, negligent use of equipment, improper intubation, and improper positioning of a patient.

Miscellaneous allegations, comprising of 2.2 percent of the total, included inappropriate or unprofessional behavior of a clinician, breach of confidentiality or privacy, and failure to follow an institutional policy or procedure. Approximately 0.5 percent of the claims related to patient monitoring. These included such allegations as failure to monitor, failure to respond to a patient, and failure to report on a patient's condition. Another 0.5 percent of the claims were related to biomedical equipment/products. These included such allegations as failure to inspect or monitor the equipment, improper maintenance, improper use, and malfunctions/failures.

In its 1994 annual report, the St. Paul Fire and Marine Insurance Company described the claims experience of the Company using major allegation groups.⁵ Figure 5 depicts a comparison of malpractice claim categories between DoD and St. Paul. The relative rates for DoD are lower for surgical and treatment related claims, while higher for claims related to diagnoses.

As stated above, in the DoD database, approximately 5 percent of allegations were related to medication. This area of practice has recently been studied in the private sector. The Physician Insurers Association of America, in 1993, completed a medication error study that referenced closed claims from twenty-four member companies.⁶ Of 90,166 total claims analyzed, 6,646, or 13.6 percent, involved medication errors. The four most frequent medication errors reported were incorrect or inappropriate dosage, medication inappropriate for condition, failure to monitor drug side

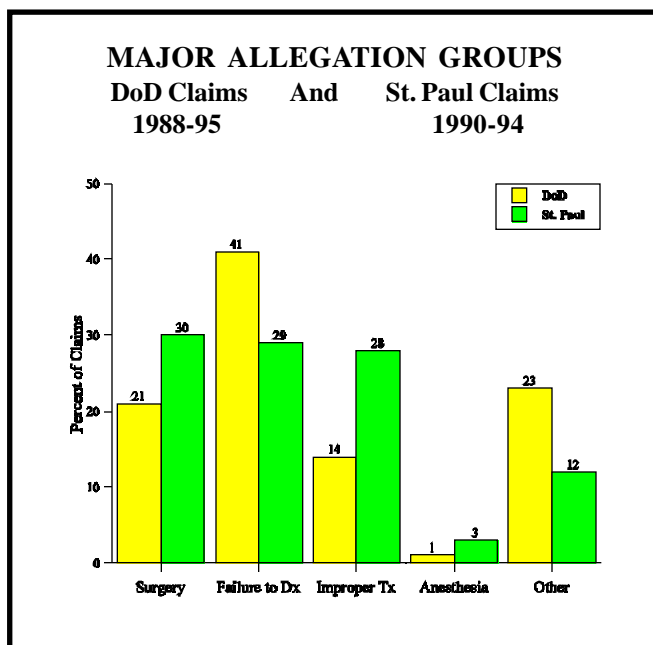


FIGURE 5

effects, and communication failure between physician and patient. In DoD, the most frequent medication errors were administering the wrong medication and ordering the wrong medication.

PROVIDER AND FACILITY CHARACTERISTICS

Figure 6 depicts the attributions of fault for 2,777 DoD claims for which data were available. In 83.2 percent of cases, the attribution of fault is to a physician. Personnel other than physicians were involved in 8.5 percent of the claims. Facility and/or equipment problems were involved in 4.3 percent of the claims. System or management failures, as the sole source of responsibility, occurred in 2.7 and 1.3 percent of the claims, respectively.

Within a treatment facility, the locale for the alleged malpractice was an inpatient setting for 64.8 percent of the claims and an outpatient setting for 28.4 percent. The remainder of allegations were distributed among dental and ancillary services. The distribution of clinical services by specialty for 1,700 reported DoD claims, for which data are available, is listed at Tables 2a and 2b. The most frequent inpatient services involving malpractice claims were obstetrics/gynecology, surgery and medicine. The most frequent outpatient services involving malpractice claims were emergency care, medicine and primary medical care.

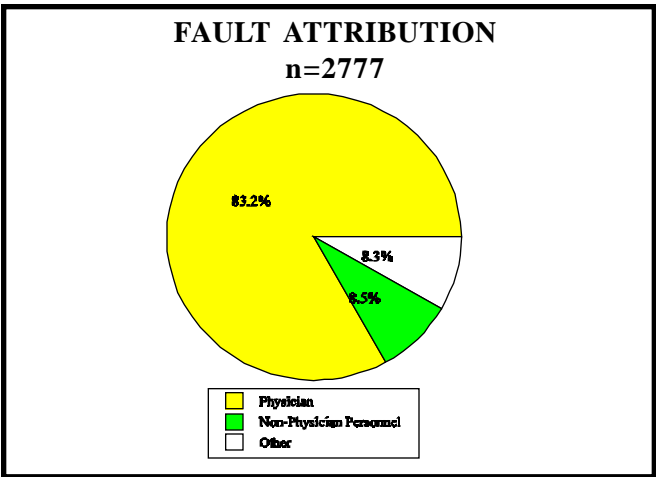


FIGURE 6

INPATIENT CLINICAL SERVICES n=1182		
	Number of Claims	Percent
Obstetrics/Gynecology	435	36.8
Surgery	367	31.1
Medicine	129	10.9
Orthopedic Surgery	102	8.6
Pediatrics	94	8.0
Family Practice	35	3.0
Psychiatry	20	1.7

TABLE 2a

OUTPATIENT CLINICAL SERVICES n=518		
	Number of Claims	Percent
Emergency Medicine	189	36.5
Medicine	96	18.5
Primary Medicine	63	12.2
Obstetrics/Gynecology	55	10.6
Surgery	39	7.5
Pediatrics	27	5.2
Family Practice	24	4.6
Orthopedic Surgery	12	2.3
Flight Medicine	8	1.5
Psychiatry	5	1.0

TABLE 2b

In 1994, St. Paul reported that 59.4 percent of its claims (4,166 of 7,010) arose in a hospital setting while 40.6 percent (2,844 claims) occurred outside the hospital. That insurer considers the latter figure a reflection of the steady growth in outpatient malpractice claims for recent years as outpatient medical care has become increasingly more common.⁷

The primary provider was a physician in 90 percent of the DoD claims. In only 2.2 percent of the claims, the primary provider was a physician assistant, and dentists were involved in 2.0 percent of the claims. Nurses were involved in 4 percent of the claims, with the following distribution: registered nurses, 1.3 percent; nurse practitioners, 1 percent; nurse anesthetists, 0.9 percent; nurse midwives, 0.8 percent.

Table 3 identifies the ten provider specialties most frequently involved in the 1,343 DoD claims for which data are available. Obstetrics/gynecology (22.5) and surgery (18.5) are the most frequently represented specialties. In the private sector, a similar level of heightened claims exposure prevails for providers of obstetrics and gynecology. According to a 1994 survey of 4,100 members of the American College of Obstetrics and Gynecology, 79.4 percent had been sued at least once in their careers.⁸

STANDARD OF CARE AND DIAGNOSES

Within DoD, determinations regarding the standard of care are formulated at the involved medical treatment facility and conclusively reviewed within the Office of the Surgeons General in the respective services. These determinations were available for 2,983 claims in Tort-2. The standard of care was considered met in 65.4 percent of claims and not met in 28.0 percent of claims. No determination was rendered in the remainder because of inadequate information available to reviewers.

Table 4 depicts the distribution of 3,026 DoD claims, for which data were available, within the 17 diagnostic groups of ICD9-CM coding system. Diagnoses of pregnancy, childbirth, and the puerperium was the most frequently represented diagnostic group (17.2 percent of claims). Approximately 14 percent of claims involved in neoplasms, and 10.2 percent of claims involved the circulatory system.

The most frequent specific diagnoses listed in the database are cancer of the breast, ischemic heart disease, fetal/placental problems, cancer of the lung, female genital pain, acute appendicitis and ectopic pregnancy. The most frequently specified surgical procedures are cesarean section, vaginal delivery, abdominal laparotomy, breast surgery, coronary artery bypass surgery, on the Fallopian tubes and spinal cord surgery.

PAYMENT INFORMATION

Table 5 (next page) reports the amounts of money paid for the resolution of 1,281 DoD malpractice claims from 1988 through 1995. A total of \$309,158,644 was

TEN MOST FREQUENTLY NAMED SPECIALTIES n=1343

	Number of Claims	Percent
Obstetrics/Gynecology	302	22.5
Surgery	248	18.5
Internal Medicine	130	9.7
Family Practice	123	9.2
Pediatrics	85	6.3
Orthopedic Surgery	79	5.9
General Medical Officer	75	5.6
Radiology	41	3.1
In Training	38	2.8
Emergency Medicine	35	2.6

TABLE 3

DIAGNOSTIC GROUPS n=3026

Pregnancy/Childbirth/Puerperium	520
Neoplasms	426
Circulatory System	308
Injury & Poisoning	281
Musculoskeletal & Connective Tissue	256
Genitourinary System	246
Digestive System	242
Nervous System & Sense Organs	176
Symptoms/Signs/Ill-Defined Conditions	98
Respiratory System	89
Perinatal Period	88
Infectious & Parasitic Diseases	85
Endo/Nutritional/Metabolic/Immunity	64
Mental Disorders	45
Skin & Subcutaneous Tissue	41
Congenital Anomalies	35
Blood & Blood Forming Organs	26

TABLE 4

paid for those claims entered into the database. Payments were made in approximately 40 percent of reported claims. Only 5 percent of claims were closed with payment that exceeded one million dollars, but they accounted for nearly half (47.6 percent) of the total amount paid. On the other hand, only 4 percent of the total was paid to resolve nearly half the claims, those with payments of \$50,000 or under.

AMOUNTS PAID n=1281			
AMOUNT (\$)	PERCENT of CLAIMS	SUM (\$)	PERCENT of TOTAL AMOUNT PAID
0 - 10,000	18.0	1,309,098	0.4
10,001 - 25,000	20.8	5,529,367	1.8
25,001 - 50,000	10.8	5,603,317	1.8
50,001 - 100,000	13.8	14,108,396	4.6
100,001 - 200,000	14.7	30,167,046	9.8
200,001 - 500,000	11.2	49,960,184	15.9
500,001 - 1,000,000	5.7	55,960,184	18.1
1,000,000 - 12,000,000	5.0	147,304,917	47.6
TOTAL AMOUNT PAID 309,158,644			

TABLE 5

A RISK MANAGEMENT TOOL

Medical malpractice data collection can be an important quality management tool. This is especially true when that information is scrutinized to highlight clinical areas of noteworthy risks that, in turn, may be subjected to other forms of more thorough quality analysis. For those purposes, DoD has directed the contractor for the Civilian External Peer Review Program, on numerous occasions, to review certain areas of medical practice rendered in military facilities.

Further, for some time, malpractice occurring in federal medical facilities has been a topic of recurring interest on the part of both Congress and the public.

The Tort-2 database represents a constant effort on the part of DoD to analyze malpractice information critically to employ it properly within the entire spectrum of DoD risk management activities. There are certain diagnoses, procedures, specialties, and medical services that appear relatively frequently among all claims entered into the database. These may well be candidates for worthwhile focused study. National professional societies, such as the American Society of Anesthesiology, have expressed interest in combining data entries from DoD cases with that derived from private sector cases for specialty risk management assessment and education. This type of professional dissemination from and to skilled health care providers, within both the federal and civilian sectors, should substantially contribute to both the maintenance and improvement of quality standards.

With the development of the 12 TRICARE regions, Tort-2 reporting will be modified. Region specific reports will be forwarded to each of the 12 regions and to TRICARE Europe. This data should constitute another useful tool for lead agents to assess the quality of care rendered in their region. Data collection from the managed care support contractors will also be explored in an attempt to monitor the quality of care delivered to DoD beneficiaries by network providers.

To further augment the comparisons of DoD experience with those of civilian health care providers, a memorandum of agreement has been entered with the Department of Health and Human Services for the purpose of studying malpractice payments registered in the National Practitioner Data Bank. Database entry comparisons for such fields as provider licensure and act or omission codes will substantially contribute to these efforts.

In addition, St. Paul is establishing a more comprehensive malpractice data collection effort, that will examine, in addition to information already reported, diagnostic groups.⁹ This should enhance DoD's ability to formulate comparisons with their data.

The Department of Legal Medicine will continue to analyze the malpractice experience of the federal and private sectors to improve the utility of the Department of Defense database as an instrument for quality improvement.

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